

Title: Autonomous Data Mining.  
Inventor: Andrew CONWAY  
Docket: 208.1001.02  
Technical Appendix

## **Technical Appendix**

Attorney docket number 208.1001.02

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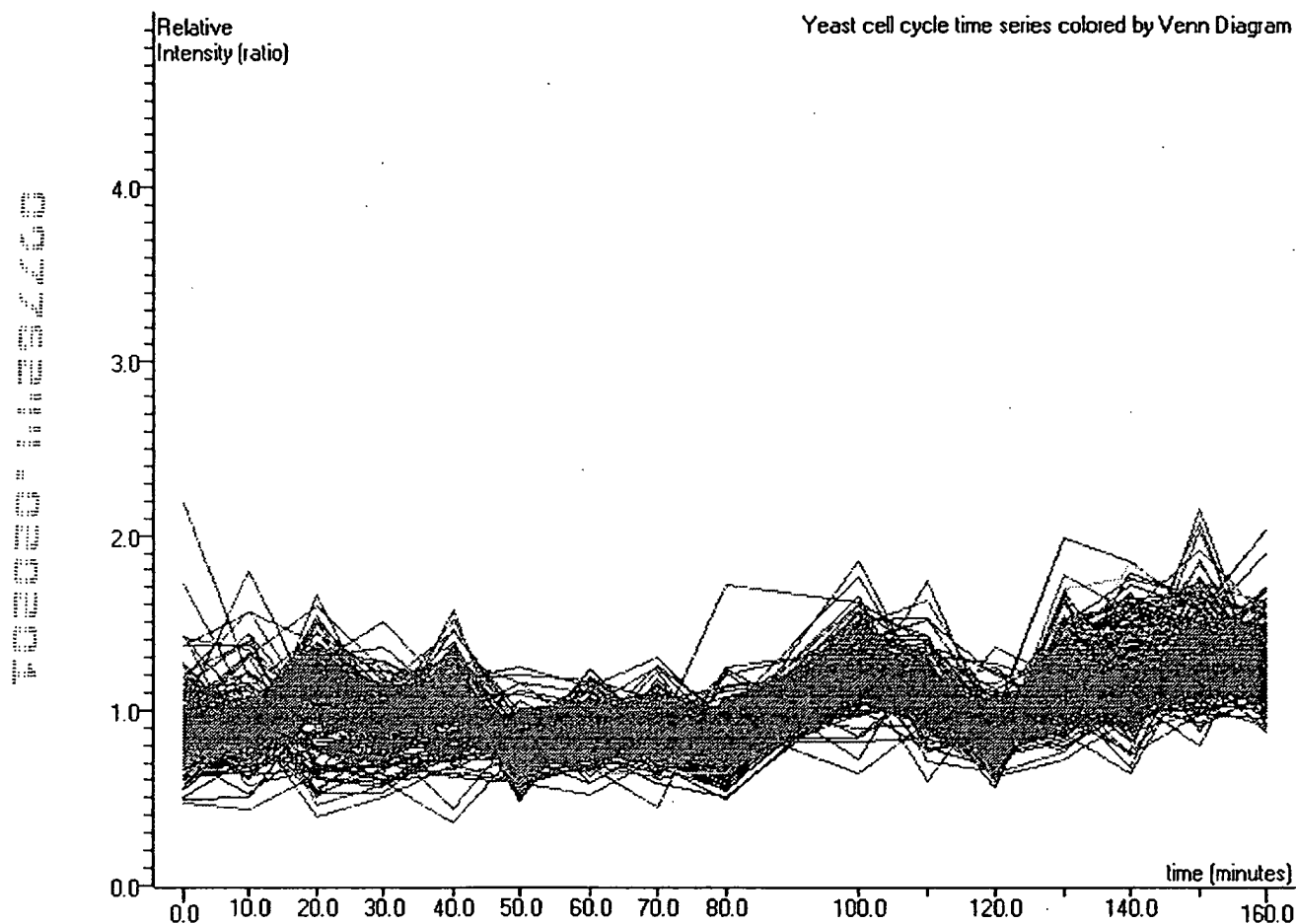
# Yeast cell cycle time series and ribosome

I was looking through your experiment called 'Yeast cell cycle time series' and found something I think you will find interesting.

I have found a set of 67 genes with similar expression patterns in 'Yeast cell cycle time series'. These genes are statistically similar to genes in another gene list containing 159 genes called 'ribosome'. 'ribosome' is a Gene List in the folder 'PIR keywords'. It was made by Andrew Conway from Silicon Genetics. These two lists share 18 genes in common.

There is of course a chance this is just a coincidence. I rate that chance at one in 1,252,202,449.

A picture is attached. If you would like to look at this in greater detail, please use the attached GeneSpring bookmark, [Report23haystack.gsp](#) or follow this link: [GenEx](#)



The co-regulated genes are plotted in red, and the genes in ribosome are plotted in green. If a gene is both, it is colored yellow.

Genes in both lists:

YBR048W (RPS11B)

YDL081C (RPP1A)

YDL130W (RPP1B)

YDR447C (RPS17B)

YDR450W (RPS18A)

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YDR471W (RPL27B)

YDL136W (RPL35B)

YDL082W (RPL13A)

Higa S, Yoshihama M, Tanaka T, Kenmochi N. Gene organization and sequence of the region containing the ribosomal protein genes RPL13A and RPS11 in the human genome and conserved features in the mouse genome. Gene. 1999 Nov 29;240(2):371-7.

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YDL083C (RPS16B)

YDR012W (RPL4B)

Ohtake Y, Wickner RB. KRB1, a suppressor of mak7-1 (a mutant RPL4A), is RPL4B, a second ribosomal protein L4 gene, on a fragment of *Saccharomyces* chromosome XII. Genetics. 1995 May;140(1):129-37.

YDL061C (RPS29B)

YDL075W (RPL31A)

YDR382W (RPP2B)

YCR031C (RPS14A)

YDR500C (RPL37B)

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YER074W (RPS24A)

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## YGL030W (RPL30)

Li B, Nierras CR, Warner JR. Transcriptional elements involved in the repression of ribosomal protein synthesis. Mol Cell Biol. 1999 Aug;19(8):5393-404.

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Mazuruk K, Schoen TJ, Chader GJ, Iwata T, Rodriguez IR. Structural organization and chromosomal localization of the human ribosomal protein L9 gene. Biochim Biophys Acta. 1996 Mar 1;1305(3):151-62.

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## YIL148W (RPL40A)

### Coregulated genes not in ribosome

## YAL003W (EFB1)

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Song JM, Cheung E, Rabinowitz JC. Organization and characterization of the two yeast ribosomal protein YL19 genes. Curr Genet. 1996 Sep;30(4):273-8.

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## YDR050C (TPI1)

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## YDR064W (RPS13)

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## YDR025W (RPS11A)

## YDL208W (NHP2)

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